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I - PRECAUTIONS TO BE FOLLOWED IN THE ADMINISTRATION OF PARENTERAL AGENTS.

Because of the danger of infection and in view of the fact that infectious hepatitis can be transmitted from one subject to another by the parenteral route, the same needle without resterilizing by boiling in water will not be used for the administration of parenteral agents to more than one patient. This means that needles must be sterilized between the parenteral injection with a change of needles between each individual. If the same syringe is to be used for injection great care must be taken when administering parenteral medication or immunizing agents that suction is not applied after or during insertion of the needle. Subjects' serum or blood must not contaminate the syringe or fluid being injected if subsequently other individuals are to be injected with the material in the syringe or the syringe is to be used without being resterilized.

II - NOTES ON TREATMENT OF RHEUMATIC FEVER.

1. Recent studies reported to the National Research Council which were conducted in the Rheumatic Fever Unit of the United States Navy have produced the following data which are of interest in respect to salicylate therapy in the course of rheumatic fever.

a. That the effective dose of sodium salicylate is 150 grains, given in divided doses throughout the day and night.

b. That sodium salicylate is absorbed very rapidly from the gastro-intestinal tract, appears in the blood within fifteen minutes, reaching its peak within sixty to ninety minutes, and begins to taper off by the end of four hours.

c. That sodium salicylate is eliminated very rapidly from the blood, within twenty-four hours, and less than 2 per cent of subjects showing traces of the drug in the blood after the twenty-four hour period.

d. That the optimum blood level for relief of symptoms is 25-30 mgms. per 100 cc of blood.

e. That the sedimentation rate is not affected by the long-continued use of sodium salicylate.

f. There is no clinical proof that sodium salicylate alters the course of the disease within the myocardium or endocardium.

g. That the prothrombin time is slightly elevated with full dosage of sodium salicylate or aspirin; but that the liver compensated for the loss of prothrombin, and after two weeks the prothrombin levels return to normal.

h. That there is no demonstrable liver damage detectable by the present-day accepted liver function tests.

i. That there is no evidence that sodium salicylate or aspirin in any way affects the kidneys, that the albuminuria, red cells and casts are not found in the course of salicylate therapy.

j. That sodium bicarbonate administration along with the sodium salicylate or aspirin does not cause a fall in the blood salicylate level.

k. That an adequate salicylate blood level can be maintained by oral administration of the drug, if the drug is given at regular intervals and is taken by the patient.

l. That the only time sodium salicylate is justifiably given intravenously is when the patient is too ill to retain the drug by mouth.

III - THE USE OF PENICILLIN IN THE TREATMENT OF BACTERIAL ENDOCARDITIS.

Reports received from the National Research Council indicate that penicillin is of value in the treatment of bacterial endocarditis. A total of 299 cases of endocarditis have been treated with the following results:

Type of Organism	Total Cases	Recovered or Improved	No Effect	Temporary Improvement	Died
Pneumococcus	49	15	2	1	31
Staphylococcus	80	20	4	1	55
Streptococcus viridans	132	73	19	13	37

IV - NUTRITIONAL ASPECTS OF MALARIA.

1. Recent studies reported to the National Research Council by Emerson and Dole of the intakes and urinary outputs of salt and water in patients ill with acute P. vivax malaria, indicate the loss of both from the body of extrarenal channels, mainly, the sweat and vomitus. It is therefore suggested that the volume and constitution of the extracellular fluid can best be maintained by

the oral administration of salt solution, 3.0 grams per liter, in volumes indicated by the patients' thirst. In severely ill patients the parenteral administration of sterile physiological saline should be used.

2. Inasmuch as large amounts of body protein are catabolized during the paroxysms of malaria, the administration of a diet high in protein and calories is indicated as soon as the patient is able to consume such a diet.

V - CHRONIC TOXICITY OF ATABRINE.

The following abstract of a National Research Council Report concerning the work of Taliaferro and Geiling is of interest. Two dogs were fed atabrine semi-weekly for 2 1/2 years and were then sacrificed 48 hours after their last dose of the drug. The pathologist who examined the tissues of these animals reports: "Of prime importance in this investigation is the lack of any pathological changes other than the pigmentary deposits. It is seldom that the toxicologist has the pleasure of reporting no significant pathological change after a two year period of continued application of a drug."

VI - RELAPSING MALARIA.

The following is taken from a report made from an Army General Hospital to the Medicine Division, Office of The Surgeon General, U. S. Army: Unselected patients who had previously had at least one attack of malaria, upon their admission to hospital and the finding of P. vivax, were divided into two groups. Group A was given the standard atabrine treatment, while Group B received this therapy plus three intravenous injections of mapharsen on the 3rd, 4th and 8th day of their illness. The patients were then followed carefully and no significant difference in the relapse rate was noted between the two groups. Mapharsen or neoarsphenamine is not recommended as therapeutic adjuncts in the treatment of relapsing malaria.

For the SURGEON:

William S. Stone

WILLIAM S. STONE,
Colonel, M.C.,
Acting Deputy Surgeon.

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